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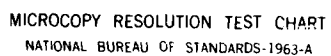
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PERSONNEL TECHNOLOGY

AN EXAMINATION OF HISPANIC AND GENERAL POPULATION PERCEPTIONS OF ORGANIZATIONAL ENVIRONMENTS

(Harry C. Triandis, Principal Investigator)

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ALLOCENTRIC VS. IDIOCENTRIC TENDENCIES:

CONVERGENT AND DISCRIMINANT VALIDATION

Harry C. Triandis
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Technical Report No. ONP-33

October, 1984

DEPARTMENT OF PSYCHOLOGY
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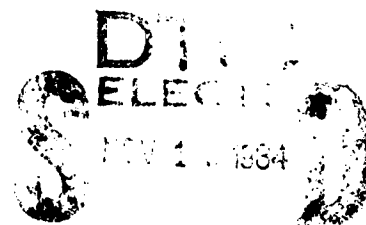
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Allocentric vs. Idiocentric Tendencies: Convergent and Discriminant Validation

Abstract

Hui's (1984) measure of collectivism was correlated with several scales that measure allocentric vs. idiocentric tendencies. It was found that those scoring high on Hui's measure do have values that are more allocentric (value COOPERATION, EQUALITY, HONESTY) and those who score low have values that are more idiocentric (value COMFORTABLE LIFE, COMPETITION, PLEASURE, and SOCIAL RECOGNITION). Allocentrism was found, in a sample of college students, to be linked to more social support and to a better quality of social support; individualism was found linked to achievement motivation, alienation, anomie and greater reported loneliness.

Implications for the recruitment and retention of Hispanics in the U.S. Navy are discussed.



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Allocentric vs. Idiocentric Tendencies: Convergent and Discriminant Validation¹

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The focus of this paper is on a psychological dimension to be named allocentric vs. idiocentric tendencies. This dimension corresponds, at the cultural level to the cooperation vs. individualism (Mead, 1967), and at the values level to the collaterality vs. individuality (Kluckhohn & Strodtbeck, 1961) dimensions. A more general term is collectivism vs. individualism. That term is reserved for discussions that do not differentiate between the psychological, values, and cultural levels.

The distinction between the psychological and the cultural level is particularly important to maintain. Suppose that a researcher has identified 20 items that measure this dimension. A factor analysis of these items, using N subjects in each culture, would discover dimensions of allocentrism-idiocentrism; a factor analysis of the same items, after summing the responses of the N subjects obtained in each culture, and factoring across n cultures, would identify collaterality (or cooperation) vs. individuality (or individualism). However, since Hofstede (1980) has already performed the latter kind of analysis and employed the terms collectivism-individualism, it is proposed that the collectivism-individualism terminology be employed for analyses at the cultural level, or where the distinction between the psychological and cultural levels is of little significance or importance.

It is assumed that individuals within cultures differ in allocentrism. Furthermore, cultures differ in the extent that cooperation is a dominant pattern of social behavior and collaterality a dominant value orientation.

In the present paper we report studies that use items that measure allocentric tendencies in U.S. culture developed by Hui (1984) and additional

items that may measure this dimension that were developed and tested. Correlates of this dimension will also be indicated.

Previous reviews (Triandis, 1983) suggested that U.S. Hispanics and most Far Eastern U.S. minorities are highly allocentric.

A substantial literature suggests that variations in the allocentric-idiocentric dimension have implications for both individuals and ingroups.

At the cultural level individualism has been found to be associated with high levels of Gross National Product (Adelman & Morris, 1967; Cobb, 1976; Hofstede, 1980) but also to several forms of social pathology, such as high crime, suicide, divorce, child abuse, emotional stress, and physical and mental illness rates (Cobb, 1976; Naroll, 1983). Allocentric subjects tend to have happy marriages (Antill, 1983), and are more likely to receive social support, which acts as a buffer of life-change stresses (Cohen & Hoberman, 1983). Low levels of social support make a person more vulnerable to mental illness (Sarason, Sarason & Lindner, 1983) while high levels of social support are likely to protect a person's health (Gottlieb, 1983), make it more likely that a person will stop smoking, lose weight (Janis, 1983), and persist at a task under unfavorable conditions (Sarason, Levine, Basham & Sarason, 1983).

Similarly, variations in this dimension have been considered in studies of morality (Shweder, 1982), religion (Bakan, 1966), work-related values (Hofstede, 1980), the concept of limited good (Foster, 1965), broad value orientations (Kluckhohn & Strodtbeck, 1961), ecology and child-rearing patterns (Barry et al., 1959; Berry, 1979), cognitive differentiation (Witkin & Berry, 1975), economic development (Adelman & Morris, 1967), modernity (Inkeles & Smith, 1974; Berger, Berger & Kellner, 1973), the structure of constitutions of various states (Massimini & Calegari, 1979); and analyses

of cultural patterns (Hsu, 1981).

Studies of the subjective culture (Triandis, 1972) of various cultural groups show differences in allocentric tendencies. Thus Southern Italians (Banfield, 1958), Greeks (Triandis & Vassiliou, 1972), and Chinese (Hsu, 1971, 1981, 1983) tend to be allocentric, while Northern and Western European and North American populations tend to be idiocentric (Inkeles, 1983; Stewart, 1966).

Individualism is a relatively stable attribute of Americans (Inkeles, 1983). It has been defended (Riesman, 1954, 1966; Waterman, 1981) and criticized (Hogan, 1975; Lasch, 1978; Rakoff, 1978; Sampson, 1977; Smith, 1978), and various attempts have been made to define patterns that are both individualistic and collectivist (Kanfer, 1979; Rotenberg, 1977). This literature has been reviewed by Triandis (1985).

However, complexities do develop because allocentrism or collectivism appears to be both setting- and group-specific. Depending on the setting (home, workplace, religion, politics, aesthetics, scientific work, the courts, schools, shops) and the specific group (family, friends, colleagues, co-workers, neighbors) individual and collective goals may or may not be intercorrelated.

Persons from a given culture appear to emphasize individual or collective goals in different settings and with different groups. This suggests that a fruitful approach to the study of this dimension may be the development of "profiles" which indicate whether the predominant tendency is allocentric or idiocentric. In the case of a culture with a modal profile that is idiocentric, we would then be justified to use the label individualist culture. Similarly, when the modal profile is predominantly allocentric we could label the culture collectivist.

The present study is exploratory and uses only U.S. subjects. It

examines the relationship of a measure of collectivism (Hui, 1984) to several other measures that seem conceptually related to allocentric tendencies.

Specifically, it was hypothesized that some values such as cooperation should be related to allocentric tendencies, and other values, such as independence to idiocentric tendencies. Furthermore, achievement tendencies, modernity, alienation and anomie may be related to idiocentric tendencies.

Our explorations also included additional methods for the measurement of the allocentric dimension. These new measures were "operant", subject is given a minimal stimulus (e.g., as in TAT), rather than "respondent" (subject is asked specific question) measures (McClelland, 1980). We also included in this study, for purely exploratory purposes, measures of social support and role perception, of Type A behavior, of loneliness, androgyny, and the California Personality Inventory.

In addition, we were concerned about the discriminant validity of the Hui measure. It may be the case that Hui's measure is nothing new. It may be so highly correlated to widely used scales in the psychological literature, such as internal-external control, Helmreich and Spence's Work and Family Orientation, the F-Scale, or Budner's measure of intolerance for ambiguity, that it does not measure a new psychological quality. By including these popular scales and showing that INDCOL does not correlate with them, we can obtain evidence about its discriminant validity.

STUDY 1

Method

Subjects

One hundred and fifty-nine male undergraduates responded to several questionnaires as partial fulfillment of an introductory psychology requirement. All were native English speakers.

Instruments

The instruments included:

(1) Fifteen values, taken from Rokeach (1973), with additions relevant to the concepts of allocentrism (cooperation, i.e., working together with others; obedience, i.e., doing what parents, bosses direct; self-sacrifice, i.e., altruism, helping others at a cost; and social recognition, i.e., respect, admiration from others) and idiocentrism (freedom, i.e., independence, free choice; pleasure, i.e., an enjoyable fun life; self-reliance, i.e., independence from others) were both ranked from most to least important and rated from 1=objectionable to 5=essential.

(2) A 30-item scale, developed by Lindgren (1976), which taps need for achievement vs. need for affiliation, requires subjects to select one of two adjectives that best describe them. For example, aggressive vs. warm; trusting vs. alert. The scale is presented to the Ss as measuring the "Prevailing Mood", and has split-half reliability of .80 and test-retest reliability of .88. Some evidence of validity has been presented by Sid and Lindgren (1981) and some evidence of robustness across cultures by Bose, Das Gupta and Lindgren (1979). Correlates of these scores were reported by Sid and Lindgren (1981).

(3) The 63 items of Hui's (1984) Individualism-Collectivism scale (INDCOL). The scale was developed to measure a collectivist orientation toward spouse, parents, relatives, friends, neighbors, co-workers and acquaintances. It has been analyzed extensively both for internal structure and correlates, and found valid in both Illinois and Hong Kong. Example of items: "I do my own thing without minding about my colleagues/classmates, when I am among them." "Whether one spends an income extravagantly or meanly is of no concern to one's relatives." Responses are from 1=strongly disagree

(definitely false) to 6=strongly agree (definitely true).

(4) Eight items that measure modernity (Gough, 1976), which converged with six well known scales of modernity, and did not correlate with measures of alienation or anomie according to Gough (1977).

(5) Five items that measure anomie (Srole, 1956) and six items that measure alienation (Middleton, 1963).

(6) Six items that measure internal-external control, which were the best of the items from previous research by Hui & Triandis (1983).

(7) The Helmreich and Spence (1978) Work and Family Orientation 23-item questionnaire which measures Mastery, Work, Personal Unconcern and Competitiveness.

(8) Ten positive and 10 negative F-scale items, taken from previous work of Triandis, Hall and Ewen (1965).

(9) The Budner (1962) 16-item measure of intolerance of ambiguity.

Procedure

Several one-hour sessions, with about 20 participants in each, were held. The participants were asked whether they wished to volunteer for further study, for pay. Those who signed up constitute the sample of the next study. The scales were then administered in counterbalanced order. The questionnaire which included the items measuring Modernity, Anomie, Internal Control, Mastery, Work, Personal Unconcern, Competitiveness, Authoritarianism, and Intolerance of Ambiguity was presented in two orders, so that it was internally counterbalanced. Counterbalancing has the effect that there are unequal Ns for some items, but about the same number of responses to all items. When one hour was up all participants were thanked and dismissed. Thus those who were slow did not respond to some of the items.

Results

INDCOL Scale

The Hui (1984) INCOL scale consists of six subscales: Spouse, parents, kin, friends, neighbors, and co-workers. We did two analyses:

(1) Those items that had been found to be reliable by Hui (1984) were verified with this new sample.

(2) Item-scale total correlations were computed for each original subscale and its items. Those items which correlated less than .30 with their respective total were discarded and new item-scale total correlation were computed for the remaining items. This procedure was repeated until subscales formed solely by items with correlations larger than .30 with their total were identified.

Comparison of the reliability of the INCOL Scale obtained from these two analyses indicated that the first analysis gave the higher alpha. However, the spouse subscale was discarded because it had insufficient reliability. The INCOL consisting of the five remaining scales had an alpha of .74, and will be used in all subsequent results.

The final subscales that constituted INCOL were:

Parents included seventeen items, such as: "My parents are the source of my pleasure and pain"; and "teenagers should listen to their parents' advice on dating" ($\alpha=.78$).

The kin subscale ($\alpha=.59$) consisted of nine items (For example, "I would help, within my means, if a relative told me that he (she) is in financial difficulty", and "If I meet a person whose last name is the same as mine, I start wondering whether we are, at least remotely, related by blood").

The neighbor subscale involved ten items, examples of which are: "I have never chatted with my neighbors about the political future of this state" (reversed), and "My neighbors always tell me interesting

stories that happened around them" ($\alpha=.72$).

The friend subscale ($\alpha=.58$) consisted of eight items (For example, "I like to live close to my good friends", and "I would rather struggle through a personal problem by myself than discuss it with my friends" reversed).

The co-worker subscale ($\alpha=.52$) consisted of thirteen items, examples of which are: "I do my own thing without minding about my colleagues/classmates, when I am among them" (reversed); "I have never loaned my camera to any colleagues/classmates" (reversed).

The INDCOL scale then consisted of the sum of the Individual means of the five subscales, and a median-split procedure was used for subsequent comparisons between the "less" and "more" allocentric participants.

Values Survey

Individual Pearson correlations were computed between the ratings and rankings of these items and the INDCOL scale.

These results showed that INDCOL, which measures collectivism, was negatively correlated (i.e., higher INDCOL values were associated with lower importance) for the rankings of competition (winning in life) ($r=-.24$, $p<.012$) and self-reliance (independence from others) ($r=-.20$, $p<.03$), and positively correlated with the rankings of cooperation (working together with others) ($r=.21$, $p=.021$), honesty (telling the truth no matter what) ($r=.24$, $p<.01$), and self-sacrifice (altruism, helping others at a cost) ($r=.25$, $p<.009$).

A similar pattern was observed for the ratings of these values, except that INDCOL was positively correlated (i.e., higher INDCOL scores were associated with higher positive evaluation) for cooperation ($r=.34$, $p=.001$). The other values that correlated with collectivism were equality (brotherhood or equal opportunity for all) ($r=.22$, $p<.017$), honesty ($r=.27$, $p<.004$)

and self-sacrifice ($r=.33$, $p=.001$). Negatively correlated with INDCOL were pleasure (an enjoyable, fun life) ($r=-.18$, $p<.041$), and self-reliance ($r=-.18$, $p<.043$) and social recognition ($r=-.17$, $p<.05$).

Item-scale total correlations were computed in order to form a general values scale. However, the results were not sufficiently consistent. Hence, we attempted to explore the possibility that diverse dimensions were being used by subjects, by performing a principal components factor analysis, with squared multiple correlations as communalities, and a varimax rotation. This analysis yielded four factors, as follows: Hedonism consisting of the values "comfortable life" (Loading = .75), "competition" (.45), "pleasure" (.57), and "social recognition" (respect or admiration from others) (.49). The second factor was labeled allocentrism; it consisted of the values "cooperation" (.57), "equality" (.61), and "honesty" (.47). The third factor was labeled conservatism and consisted of the values "national security" (.47), "obedience" (.51), and "salvation" (.52). Finally, a factor that was labeled self-determination consisted of "creativity" (.55), "freedom" (independence or free-choice) (.44), and "self-reliance" (.45). The internal consistency of these scales yielded the following Cronbach alphas: Hedonism (.70), Allocentrism (.57), Conservatism (.45), and Self-Determination (.47). Of these factors, only Hedonism and Allocentrism were found to be correlated with INDCOL scores ($r=-.18$, $p<.05$; and $r=.36$, $p=.001$, respectively).

A similar pattern was found for the corresponding t -tests. Specifically, comparison of the INDCOL idiocentric and allocentric participants (after median split) showed that the former valued Hedonism more highly than the latter [$M=15.76$ vs. 14.49 , $t(87) = 2.43$, $p<.02$], and the latter valued Allocentrism more highly than their idiocentric counterparts [$M=11.96$ vs. 10.26 , $t(89) = -4.02$, $p<.001$].

Lindgren's Measure of Need Achievement

This scale was highly reliable ($\alpha=.84$), and was negatively correlated with the kin ($-.25$), friend ($-.20$) and co-workers ($-.27$) subscales (all $p<.01$). This pattern was confirmed by the corresponding t -test [$t(86)=2.38$, $p<.02$], with low INDCOL scorers having a higher need for achievement than the allocentric participants ($M=14.75$ vs. 11.80).

Modernity

This eight-item scale had a low, but positive, Cronbach alpha (.21), and was correlated with the INDCOL co-worker subscale ($r=.17$, $p<.05$) only. However, it failed to differentiate between low and high allocentrics in the overall INDCOL t -test.

Alienation and Anomie

The six-item alienation scale had a Cronbach alpha of .46, and was negatively correlated with INDCOL ($r=-.27$, $p=.01$). Thus, the more allocentric participants were less alienated. The INDCOL subscales that correlated significantly with alienation were: parents ($-.18$, $p=.02$), neighbors ($-.28$, $p<.001$) and co-workers ($-.22$, $p<.02$).

The five-item anomie scale was highly reliable ($\alpha = .70$), and was also negatively correlated with INDCOL ($r=-.35$, $p<.001$). This difference was captured also by the results of a t -test, which indicated that idiocentric participants had higher anomie scores than allocentric ones did [$M = 12.90$ vs. 10.81 , $t(85) = 3.12$, $p=.002$].

The internal-external control, the four Helmreich and Spence scales, the F -scale and the tolerance of ambiguity scale were included to check on the discriminant validity of INDCOL. These seven scales were correlated both with INDCOL and with the INDCOL subscales. Thus, a total of 42 correlations were computed; hence we expected two or three of these to be

significant by chance, at the conventional $p < .05$ level. The results indicate somewhat higher than chance levels: The Helmreich-Spence Mastery scale correlated with the collectivism towards neighbors scale .24, $p < .01$; the Competition scale correlated with co-worker collectivism -.20, $p < .03$. The F-scale also correlated with co-worker collectivism -.19, $p < .02$. Competition linking with individualism is credible; the other two correlations do not appear theoretically meaningful, and may be due to chance. In any case, the correlations are few and low. Thus, the INDCOL scale appears to have satisfactory discriminant validity.

Some of the value dimensions were significantly correlated with the INDCOL subscales: Hedonism correlated with kin collectivism ($r = -.15$, $p < .04$). Allocentric values correlated with the kin (.23), neighbors (.22), friends (.25) and co-workers collectivism subscales (.32), all at $p < .01$. Thus, we find that the INDCOL subscales correlate much as the total INDCOL, and in general the more collectivist subjects have allocentric values, while the more individualist subjects tend to have hedonistic values.

Discussion

Collectivism, as measured by the INDCOL scale converged with allocentrism, as measured by the value items. Individualism, as measured by INDCOL showed some convergence with Hedonism, as measured by the value items. The values that defined the Allocentrism value factor included COOPERATION, EQUALITY and HONESTY. The values that defined the Hedonism value factor included A COMFORTABLE LIFE, COMPETITION, PLEASURE, and SOCIAL RECOGNITION.

In addition, idiocentrism was related to need for achievement, as measured by the Lindgren scale, alienation and anomie, but only one of its subscales related to Modernity.

Thus, in this study we were able to identify both convergent validity and discriminant validity of the construct. The variables with which the construct are correlated are as expected: The correlation with alienation

and anomie is consistent with Naroll's (1983) argument, and the correlation with need achievement fits Hofstede's (1980) theorizing.

Given that the INDCOL scale does converge as expected, the next study was even more exploratory. Is allocentrism related to other variables? Since most of the subjects who participated in this study did not return for the next study the sample is limited, but for exploratory purposes it is of some interest.

STUDY 2

Method

Subjects

Sixty-seven of the original 159 subjects volunteered, for \$3.50/hour pay, for additional participation and were scheduled for a separate two-hour session, at their convenience. These sessions were held in different seminar rooms in groups of ten.

Instruments

Several questionnaires were used in this study. One of these had two counterbalanced forms. The remaining questionnaires were administered, at random, in counterbalanced order both within (different subjects getting different orders) and across sessions.

The subset of 67 subjects who took part in this study provided the following Cronbach alphas for the INDCOL (.75) and its subscales: parents (.87), kin (.62), neighbors (.71), friends (.66) and co-workers (.50).

The instruments completed by these respondents included:

(1) An "operant" measure of allocentrism. The participants were asked to write, in a grid consisting of 10 rows and 10 columns, up to 10 persons or groups (rows) who had influenced them to reach important decisions, and to list up to 10 important behaviors or decisions (the columns). This

resulted in a 100-cell grid. The participants were then instructed to place one of three marks in each cell. (a) A circle was placed if they disagreed with the group under consideration with respect to the particular behavior or decision (a situation assumed to occur more frequently among idiocentric subjects). (b) An X was placed when they had agreed about the decision (assumed to be an allocentric tendency). (c) A blank was left if the participants had not discussed the issue with the particular group.

In the next step the participants were asked to review the cells with the circles, and to indicate with a check (✓) if they had done what they wanted or what the others wanted, despite the original disagreement (a situation indicating allocentric tendencies). This mark provided a second measure of allocentric tendencies. The proportion of the cells that had circles (indicating disagreement) correlated $-.29$ ($p < .02$) with the INDCOL parent subscale, indicating that the parent collectivism scale is associated with less disagreement. The proportion of cells that had circles was correlated $.44$ ($p = .001$) with the INDCOL neighbor scale, indicating that neighbor collectivism is associated with more disagreement. Finally, the proportion of check marks in circles which supposedly measured conformity/allocentrism correlated $-.28$, $p < .02$, with the INDCOL neighbor scale, suggesting that those who are neighbor collectivists show less conformity/allocentrism. Since these results are contradictory, and weak, it was decided to drop this instrument from further consideration. A discussion of the reasons this method does not seem to measure allocentric tendencies may be found in Verma (1984).

(2) Another operant measure of allocentrism required the participants to list seven "consequences of work" and seven "consequences of succeeding at work". The responses of the subjects were content analyzed, by classifying them as "idiocentric" (centered around the individual) or "allocentric"

(centered around other persons or groups). The total number of themes was obtained, and the percent of the themes out of the total that were idiocentric or allocentric in the output of any respondents was correlated with that respondent's INDCOL score.

(3) The Sarason Social Support Questionnaire (Sarason, Levine, Basham & Sarason, 1983) was used. This 23-item instrument yields scores for (a) perceived number of social supports and (b) satisfaction with social support. It was found to be reliable [$\alpha=.92$ for (a) and $.95$ for (b)] and related in previous research to positive life changes. Sarason has reported that subjects scoring high are able to persist at a task under frustrating conditions to a greater extent than subjects scoring low. The items ask questions such as: "Who do you know whom you can trust with information that could get you in trouble?" Respondents can write the initials of up to nine persons, and then rate on a 6-point scale the extent of their satisfaction with the support received.

(4) A role differential (Triandis, Vassiliou, & Nassiakou, 1968) asked respondents to rate on a 5-point scale (1=almost always to 5=almost never) the probability (how likely it is) that a particular behavior will occur in six role pairs: mother-son, brother-brother, father-son, friend-friend, foreman-worker, and worker-foreman.

(5) The Eysenck Components of Type-A Behavior Scale (Eysenck & Fulker, 1983) consisted of three factors: Tenseness, Ambition, and Activity. One possibility is that idiocentric subjects might be high on such factors. The scale consists of 28 items marked true or false. For example, "It irritates me a lot to be interrupted in work", "I have an ambitious forceful personality", "I get things done quickly". The reliabilities were: for Tenseness $\alpha=.93$, for Ambition $\alpha=.85$ and for Activity $\alpha=.81$.

(6) The eight-item Berkowitz Social Concern Scale (Berkowitz & Lutterman, 1968) appeared to have some conceptual linkage with collectivism. It includes items such as "Every person should give some of his time for the good of his town or country." Responses follow a Likert-format. This scale had low reliability with this sample.

(7) Sixty items from Schmidt and Sermat's (1983) study, measuring loneliness, which had $\alpha=.86$, were included to check on the possibility that allocentric subjects are less lonely than idiocentrics. The items are responded in true/false format. If the described circumstances do not apply, the respondents were asked to mark the item false. For example, an item was "I find it easy to express feelings of affection towards members of my family" (reversed); "Most everyone around me is a stranger."

(8) Bem's androgyny scale (Bem, 1974), consisted of 40 adjectives that correspond to male (self-reliant, independent, and athletic) or female (yielding, shy, affectionate) stereotypes. The male attributes have an individualistic flavor, and the female a collectivist flavor. These self-descriptive adjectives were rated by the respondents on a five-point scale, from (1) never or almost never true to (5) always true of themselves. We wished to see if the idiocentric respondents see themselves as more masculine and the allocentric as more feminine. The masculinity and femininity scales had alphas of .88 and .81 respectively.

(9) The Johnson and Norem-Hebeisen (1979) measure of cooperative ($\alpha=.73$), competitive ($\alpha=.77$) and independence ($\alpha=.84$) attitudes was used to check if idiocentric subjects score high on the independence items and allocentric subjects high on the cooperative items. Ratings used a true/false format.

(10) The California Personality Inventory (Gough, 1975) was also used.

Because of the length of this inventory the respondents answered it last. Some of them did not complete it, by the end of the 2-hour period. We asked a three-member panel of judges familiar with the constructs of collectivism and individualism to select items that these allocentric or idiocentric subjects would be likely to endorse. For example, an allocentric item was "people have a real duty to take care of their aged parents, even if it means making some pretty big sacrifices"; an idiocentric item was "I must admit I often try to get my own way regardless of what others may want." We identified ten items (five idiocentric/individualist and five allocentric/collectivist). However, there was no convergence between INDCOL and the scale formed by these ten items.

Results

Work Consequences

For these items, a collectivism index was developed that was based on the ratio of collectivist consequences listed to the total number of consequences mentioned. A frequency of the number of participants with different collectivism percentages was then obtained. The results of this analysis showed that all of the participants responded to this questionnaire in rather idiocentric ways, thus precluding further analyses. Specifically, 58.2% of the subjects provided only idiocentric consequences, giving an allocentrism index of 0%. The indices for the remaining 41.8% of the subjects ranged from only 7% to no more than 21%.

Social Support Questionnaire

As mentioned above, this instrument involved two kinds of items: One of them concerned network range (i.e., number of supporters or SSQ-N) and the other satisfaction with the support received (SSQ-S). The satisfaction

with social support scale correlated .35 ($p < .04$) with the neighbor INDCOL subscale, but none of the others.

Analyses involving individual items were carried out for both network range and satisfaction. These analyses revealed that network range (number of people who support) was significantly correlated with INDCOL with respect to being listened to when one needs to talk ($r = .44$, $p < .016$), feeling an important part of others' lives ($r = .29$, $p < .03$) totally being oneself ($r = .29$, $p < .03$), being comforted by being held in someone else's arms ($r = .39$, $p < .033$). Similarly, satisfaction with the support received was significantly correlated with INDCOL. Specifically, collectivists expressed satisfaction with being listened to ($r = .25$, $p < .05$), and being important to others' lives ($r = .29$, $p = .029$), others being dependable when help is needed ($r = .42$, $p = .003$), counting on others to help in crisis situations ($r = .34$, $p = .012$), and availability of others who listen openly and uncritically ($r = .36$, $p = .042$).

Behavioral Differential

A principal components factor analysis with square multiple correlations as communalities and varimax rotation, was performed on each of the six role pairs used.

The results of these analyses are summarized in Table 1. Of particular interest is the fact that all role pairs resulted in association, dissociation, and some form of subordination factors, but some of these role-pairs also included diverse kinds of association (e.g., Love, Companionship, Respect). Thus, positive behaviors appear to be more differentiated than negative behaviors.

Of these factors, only one correlated significantly with INDCOL: companionship between father and son ($r = .37$, $p < .01$). Allocentric participants reported this behavior to be more likely than did the idiocentric subjects.

The t -tests reflected the difference between idiocentrics and allocentrics (as per INDCOL scores). Specifically, idiocentrics were found to consider association as less likely than allocentrics for mother-son [$t(39)=2.77$, $p=.008$], brother-brother [$t(42)=2.25$, $p=.03$], and also in companionship between father and son [$t(41)=2.85$, $p=.007$]. Only one significant result would be expected by chance at the .03 level.

A closer examination of these results revealed that some relevant individual items also differentiated between the behavioral expectations of high and low allocentrics for these role-pairs. Specifically, idiocentrics considered that a mother was less likely to work together with her son [$t(40)=3.25$, $p=.002$], and to play games with him [$t(40)=4.06$, $p<.001$] than did collectivists. Similarly, brothers were viewed as less likely to tell personal problems to one another [$t(38)=2.04$, $p=.049$] by low than by high-INDCOL scorers, as was the case for a father working together or playing games with his son [$t(41)=2.77$, $p=.008$; and $t(40)=3.11$, $p=.003$, respectively], a foreman respecting or playing games with a worker [$t(41)=2.21$, $p=.033$; and $t(35)=2.30$, $p=.028$, respectively] and, conversely, for a worker respecting or playing games with a foreman [$t(41)=3.03$, $p=.004$; $t(32)=2.31$, $p=.028$, in that order]. All these items corresponded to associative behaviors and involved the majority of significant cases. The sole exception was that the less collectivist persons rated the probability that a worker would argue with a foreman as less likely than the more collectivist participants did [$t(41)=2.15$, $p=.037$].

Other Scales

The Schmidt and Sermat (1983) loneliness scales correlated $-.33$ ($p<.02$) with INDCOL. The INDCOL subscale with the strongest correlation was the kin scale ($-.44$, $p<.001$). Thus, the idiocentrics appear to be more lonely than the allocentrics [means of 16.8 vs. 11.4, $t(29)=2.1$, $p<.05$].

The Johnson et al. cooperation scale correlated .31 with INDCOL ($p=.02$), and the independence scale $-.43$ ($p<.003$) with INDCOL. Thus the allocentrics were higher in cooperation than the idiocentrics [$t(21)=-3.44$, $p=.002$] and the idiocentrics higher on the independence scale [$t(34)=2.37$, $p=.024$]. In addition, several of the INDCOL subscales by themselves showed positive correlations with Johnson cooperation and negative correlations with Johnson independence.

The Eysenck-Fulker ambition scale correlated .28 ($p<.04$) with INDCOL. The Bem femininity scale correlated .31 ($p<.02$) with the co-workers scale.

The mother- and father-son role differential judgments did not correlate significantly with the parent subscale of INDCOL (as one might have expected), but there was a strong tendency (20 significant r s) for most of the INDCOL subscales to correlate significantly with judgments that positive behaviors (association, companionship, respect, love) are likely to occur in family roles. Also, many correlations were in the predicted direction (e.g., the co-workers scale with worker-foreman) but not significant.

For exploratory purposes we correlated the INDCOL subscales with some of the scales of the California Psychological Inventory. We selected the Community, Good Impression, Self-acceptance, Sense of Well-being, scales as potentially linked to collectivism, and the Achievement via Conformity and Achievement via Independence scales as conceivably linked to individualism. Due to the fact that the CPI is a long instrument we administered it at the end, and many of the subjects did not complete it. So, we only had data from 29 subjects. With such a small N the results are, of course, unstable. But inspection of the correlations did not suggest any important and dependable trends. Only three of the 36 correlations were significant, the two highest linking Communalilty with the INDCOL co-worker scale ($r=-.43$, $p<.03$) and Achievement via Independence with the INDCOL friends ($r=.41$,

$p < .02$) subscales. If one were to take these correlations seriously one would say that co-worker collectivists tend to be low in communality (impatient, changeable, complicated, imaginative, disorderly, deceitful, etc.) and those high on friend collectivism high on Achievement via Independence (mature, forceful, strong, dominant, demanding, etc.). Neither of these links appears consistent with theory, so we assume that these correlations are due to chance, or to interactions with other variables.

Collectivism-Individualism are Curvilinearly Related to Other Variables

The subjects who were high on INDCOL were used as one group and those low (median split) as the other group. The outside variables that were correlated with collectivism in the previous analyses were used again, but this time two correlations were computed, one for the highs (collectivists) and one for the lows.

On a few occasions the sign of the correlations with outside variables were opposite. Such cases suggest curvilinearity. Table 2 lists these cases. The presence of a difference sign suggests that the variable may change meaning when the subjects are relatively high or low on INDCOL.

Discussion

This exploratory study had much less power than the previous study, because the N was only 67 instead of 159. Nevertheless, even with a small N a strong relationship was noticed.

Results show that allocentric subjects perceive that they receive more social support, at least in some social situations, and are more satisfied with the support they receive. They see more association behaviors in various roles, with the exception of argue with which they rated as more likely than did the idiocentrics. However, one interpretation of this finding is that those who are allocentric are sufficiently comfortable in interpersonal relationships, and have enough "credit" from others, to b-

able to afford to argue. The convergence of this scale with the Johnson et al. scale, supports the concurrent validity of INDCOL. The small correlation with Eysenck's ambition scale was unexpected, and may be due to chance.

The curvilinear relationships of Table 2 may be interpreted as follows: The middle of the INDCOL scale includes the "typical" American subject, who tends to be quite individualistic. The low pole, or the more idiocentric side, includes those who are optimistic about the American dream of modernity and expanding opportunities (hence no special need for competition). At the high end of the scale, are those who are reacting to the extreme versions of American individualism. Those who are allocentric would favor togetherness, interdependence, and while they also are modern, they create warm social groups and are thus less alienated, less competitive, less lonely, and receive more social support and better quality of social support from their friends. Finally, the more allocentric they are the more they see father-son relationships in companionship rather than in family-hierarchy terms.

The non-significant relationships seem worthy of a comment. Of course, a non-relationship is difficult to interpret, since it may be due to inadequacies in the psychometric properties of an instrument or in the theoretical conception. Thus, the failure of INDCOL to converge with the Berkowitz measure appears to be related to the low reliability of the latter for the present sample.

General Discussion

The theoretical conceptualization of allocentrism-idiocentrism seems to correspond to empirical findings. Allocentrism as measured by INDCOL is related to allocentric values such as cooperation, equality and honesty;

idiocentrism to individualist values such as a comfortable life, competition, pleasure, and social recognition. Allocentrism seems linked to the social support received; both in the quantity and satisfaction with the support showed the result.

Idiocentrism is linked to need for achievement, alienation, anomie, and loneliness.

The nomological network that links INDCOL with other measures provides further support about the validity of the scale.

Thus now we have several ways to measure allocentric tendencies: the INDCOL, the Triandis, Leung and Villareal (1984) items, and some of the methods outlined above. Further work requires the conjoint use of these items, to obtain the best possible scales, and the confirmation of the findings of the present study. If the nomological network of these two sets of studies is supported with another sample, it will be useful to obtain further data with samples both in the U.S. and abroad, to further confirm the findings.

Implications for Recruitment and Retention of Hispanics in U.S. Navy

Triandis (1983) summarized massive evidence suggesting that U.S. Hispanics are more allocentric than the non-Hispanic majority of U.S. culture. If the present findings apply to the problem of the recruitment and retention of U.S. Hispanics in the U.S. Navy (and we must remind the reader that this was a preliminary study with a college sample and must be replicated with samples of Navy recruits), it suggests that Hispanics may have special difficulties adjusting to an individualistic environment (which is inevitably the environment of large bureaucracies). They may require special training to become familiar with that environment and to feel comfortable in it.

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Notes

- 1 Valuable comments on an earlier version of this paper were made by Harry Hui.

Table 1

Factor Loadings for Behavioral Differential

| | | | |
|---------------------|----------------------|---------------------------|------|
| MOTHER- SON | <u>Dissociation</u> | Gives orders | .48 |
| | | Fights with | .70 |
| | | Criticizes the work of | .74 |
| | | Argues with | .71 |
| | | Respects | -.55 |
| | | Threatens | .67 |
| | | Laughs at | .38 |
| | | Admires the ideas of | -.53 |
| | <u>Association</u> | Tells personal problems | .40 |
| | | Reveals intimate thoughts | .49 |
| | | Works together with | .84 |
| | | Plays games with | .75 |
| | <u>Subordination</u> | Asks for permission of | .82 |
| | | Takes orders from | .68 |
| | <u>Love</u> | Loves | .56 |
| BROTHER- BROTHER | <u>Dissociation</u> | Fights with | .83 |
| | | Criticizes the work of | .71 |
| | | Argues with | .81 |
| | | Threatens | .75 |
| | | Laughs at | .45 |
| | <u>Association</u> | Tells personal problems | .71 |
| | | Loves | .41 |
| | | Reveals intimate thoughts | .74 |
| | | Respects | .66 |
| | | Laughs at | -.41 |
| | | Admires the ideas of | .58 |
| | <u>Companionship</u> | Works together with | .77 |
| | | Plays games with | .52 |
| | <u>Subordination</u> | Asks for permission of | .67 |
| | | Takes orders from | .64 |
| FATHER- SON | <u>Dissociation</u> | Fights with | .71 |
| | | Criticizes the work of | .54 |
| | | Argues with | .74 |
| | | Threatens | .59 |
| | | Laughs at | .53 |
| | <u>Subordination</u> | Gives orders | -.58 |
| | | Asks for permission of | .78 |
| | | Takes orders from | .59 |

Table 1 (Continued)

| | | | |
|-------------------|-------------------------------------------|---------------------------|-----|
| | <u>Respect</u> | Respects | .56 |
| | | Admires the ideas of | .80 |
| | <u>Companionship</u> | Loves | .36 |
| | | Works together with | .64 |
| | | Plays games with | .78 |
| | <u>Association</u> | Tells personal problems | .83 |
| | | Reveals intimate thoughts | .53 |
| FRIEND- FRIEND | <u>Dissociation</u> | Fights with | .81 |
| | | Criticizes the work of | .62 |
| | | Argues with | .78 |
| | | Threatens | .76 |
| | | Laughs at | .47 |
| | <u>Superordination/ Subordination</u> | Asks for permission of | .76 |
| | | Gives orders | .64 |
| | | Takes orders from | .98 |
| | <u>Association</u> | Tells personal problems | .76 |
| | | Reveals intimate thoughts | .53 |
| | | Works together with | .64 |
| | | Plays games with | .74 |
| | <u>Love</u> | Loves | .87 |
| | <u>Respect</u> | Respects | .74 |
| | | Admires the ideas of | .49 |
| FORMAN- WORKER | <u>Dissociation</u> | Fights with | .74 |
| | | Argues with | .78 |
| | | Threatens | .63 |
| | | Laughs at | .46 |
| | <u>Respect</u> | Respects | .98 |
| | | Works together with | .49 |
| | | Admires the ideas of | .56 |
| | <u>Association</u> | Tells personal problems | .64 |
| | | Loves | .41 |
| | | Reveals intimate thoughts | .76 |
| | <u>Subordination</u> | Asks permission of | .72 |
| | | Takes orders from | .66 |
| | <u>Superordination</u> | Gives orders to | .50 |
| | | Criticizes the work of | .69 |

Table 1 (Continued)

| | | | |
|--------------------|---------------------------------|---------------------------|-----|
| WORKER- FOREMAN | <u>Association/ Respect</u> | Respects | .78 |
| | | Works together with | .49 |
| | | Admires the ideas of | .81 |
| | | Asks for permission of | .42 |
| | <u>Dissociation</u> | Fights with | .53 |
| | | Argues with | .90 |
| | | Laughs at | .52 |
| | <u>Association</u> | Loves | .60 |
| | | Reveals intimate thoughts | .66 |
| | | Plays games with | .42 |
| | <u>Superordination</u> | Gives orders | .71 |
| | | Criticizes the work of | .50 |
| | | Threatens | .61 |
| | <u>Subordination</u> | Asks for permission of | .46 |
| | | Takes orders from | .50 |

Table 2

Correlations of INDCOL with Other Variables, for Collectivists (those higher than the median) and Individualists

| <u>Other Variables</u> | <u>Individualists</u> | <u>Collectivists</u> | <u>N</u> |
|-------------------------------------------------|-----------------------|----------------------|----------|
| Modernity | -.28 ($p < .04$) | .29 ($p < .04$) | 159 |
| Alienation | .12 | -.33 ($p < .02$) | 159 |
| Competitive Values | .21 | -.25 ($p < .05$) | 159 |
| Loneliness | .01 | -.34 ($p < .06$) | 67 |
| Quantity of Social Support (SSQ-N) | -.05 | .31 | 67 |
| Quality of Social Support (SSQ-S) | -.15 | .38 ($p < .04$) | 67 |
| Father-Son Companionship in Role Perceptions | -.09 | .38 ($p < .04$) | 67 |

LIST 1
MANDATORY

Defense Technical Information Center (12)
ATTN: DTIC DDA-2
Selection and Preliminary Cataloging Section
Cameron Station
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Director, Human Resource Management
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Director, Manpower & Personnel
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Director, System Laboratory, Code 07
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BUMED

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List 6

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Department of Administrative Sciences
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Superintendent
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List 7 (Continued)

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Millington, TN 38054

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Millington, TN 38054

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Human Resource Management Center
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Arlington, VA 22209

Commanding Officer
Human Resource Management Center
5621-23 Tidewater Drive
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Commander in Chief
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Norfolk, VA 23511

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Human Resource Management Detachment
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Officer in Charge
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